

(4)

7. Write short notes on following:  $2\frac{1}{2} \times 3 = 7\frac{1}{2}$

efrcveeueeKele hej me#ehle eShheCeUeeB eueeKeUes

(i) Alternation of Generation

heek(er SkeaeVlej Ce

(ii) Coral reefs and their significance

DeJeeue efrcveeueeB SJeB Gvekeae cenIJe

(iii) Locomotion in Hydra.

neF[ê ceWieceve

Unit-IV

FkeaeF&I V

8. Give an account of various larval stages in life cycle of Fasciola.  $7\frac{1}{2}$

heaeMDeesuee kea peeeve Ueeâ kea efrcveeuee ueeJee&DeJemLeeDeell/keae efrcveeuee oeepeS-

9. Write notes on following:

efrcveeueeKele hej eShheCeer eueKeW:

(i) Important characters of Phylum Platyhelminthes

melle huensensueeevLeepe kea DeceJKe ue#eCe

(ii) Mode of infection, Pathogenicity and therapy of Taenia

ŠeevUee keae mebaeeCe efrcveeuee, jeepevelee Je efrcveeuee

(iii) Filaria warm.

heaeFueej Uee keaece-

A

(Printed Pages 4)

S-655

B.Sc. (Part-I) Examination, 2015

(Regular & Exempted)

ZOOLOGY

First Paper

Nonchordata-I (Protozoa to Helminthes)

Time Allowed : Three Hours ] [ Maximum Marks : 50

Note : Answer five questions in all. Question No.

1 is compulsory. Attempt one question from each Unit. Illustrate your answers with suitable diagrams.

keae heeBe DeMveellkeâ Goej oeepeS- DeMve meB 1 DeaeJeeUe&nrw DeUeekeâ FkeaeF&mes Skeâ DeMve keaepeS- GheJeeâ efrcveeueeEej e Deheves Goej eWkeaes meBDeUee keaepeS-

1. (a) Describe briefly the following:  $2 \times 5 = 10$

efrcveeueeKele keae me#ehle JeCeUee keaepeS:

(i) Excretory organ of Ascaris

ieesuekeae keae GImepette Dehe

(ii) Nematocyst

oMkeaeesMkeae

(2)

(iii) Flame cells

Flame cells are found in flatworms.

(iv) Noctiluca

Noctiluca is a bioluminescent dinoflagellate.

(v) Gemmule

Gemmules are resting stages of planarians.

(b) Differentiate between the following:

Each question carries 2 marks:  $2 \times 5 = 10$

(i) Schizogony and Sporogony

Schizogony is a form of asexual reproduction in ciliates, while sporogony is a form of asexual reproduction in some algae and fungi.

(ii) Gonads of Obelia and Aurelia

Obelia has a specialized reproductive system with gonads, while Aurelia has a diffuse reproductive system.

(iii) Planula and Parenchymula

Planula is the larval stage of a flatworm, while parenchymula is the larval stage of a ciliate.

(iv) Male and Female Ascaris

Male Ascaris has a long tail and a small head, while female Ascaris has a shorter tail and a larger head.

(v) Uterus of Mature and Gravid Proglottid of Taenia

In a mature proglottid, the uterus is small and contains few eggs, while in a gravid proglottid, the uterus is large and contains many eggs.

Unit-I

Page 1

2. Describe the life cycle of Monocystis.  $7\frac{1}{2}$

Monocystis is a ciliate that has a complex life cycle involving both asexual and sexual reproduction.

S-655

(3)

3. Give an account of and mode of feeding of Paramecium.  $7\frac{1}{2}$

Paramecium is a unicellular ciliate that feeds by filtering food particles from its environment.

Unit-II

Page 1

4. Give an account of Cellular organization of Sponge.  $7\frac{1}{2}$

Sponges are multicellular animals with a simple cellular organization.

5. Classify the following and mention their salient features:  $2\frac{1}{2} \times 3 = 7\frac{1}{2}$

Each question carries 2 marks:  $2 \times 3 = 6$

(i) Euplactella

Euplactella is a genus of sponges.

(ii) Spongilla

Spongilla is a genus of sponges.

(iii) Euspongia

Euspongia is a genus of sponges.

Unit-III

Page 1

6. Give a Comparative account of Medusa of Obelia and Aurelia.  $7\frac{1}{2}$

Obelia and Aurelia are both colonial invertebrates, but they differ in their life cycles and reproductive strategies.

S-655

P.T.O.